

DSM-V PTSD Diagnostic Criteria for Children and Adolescents: A Developmental Perspective and Recommendations

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The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) should ensure systematic attention to age-specific manifestations and selective modifications of the diagnostic criteria for posttraumatic stress disorder (PTSD) among children and adolescents. The authors propose developmental refinements to the conceptual framework for PTSD based on an appreciation of the different neurosignatures of danger and safety, and maturational processes that underlie symptom presentation. This includes preliminary evidence for the developmental salience of additional dimensions for PTSD (e.g., recklessness and thrill-seeking). The authors provide conservative recommendations for DSM-V diagnostic criteria that primarily highlight age-related developmental manifestations that, if included in the accompanying text, would bring a richer appreciation of developmentally linked symptom presentations.

As the American Psychiatric Association (APA) moves toward the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)*, scientific, and clinical advances in the etiology and nature of PTSD among children and adolescents, along with increased knowledge of child and adolescent development, make for an opportune time to expand upon earlier *DSM III-R* and *DSM-IV* efforts (APA, 1987, 1994) to incorporate developmentally informed diagnostic criteria (Pine et al., 2002). The incorporation of this developmental perspective will promote more accurate characterization of PTSD symptoms across developmental stages; the development of improved assessment instruments; increased attention to developmentally tailored interventions; better trauma-informed support from parents, school personnel, and child-serving systems; and enhanced research and mental health policy. Here we present a preliminary framework to help promote systematic attention to age-related symptom manifestations and selected diagnostic criteria modifications, along with preliminary recommendations for *DSM-V* text explication that can enrich diagnostic practice.

Before considering potential developmental refinements to the diagnosis, it is important to acknowledge that considerable empirical and clinical evidence has accumulated since *DSM III-R* and *DSM-IV* that documents the utility of the diagnosis of PTSD for school-age children and adolescents. For example, several continuous scale and structured diagnostic instruments for PTSD with solid psychometric properties have been developed. Measures of PTSD in children and adolescents have shown excellent internal consistency, with strong convergent validity (Balaban et al., 2005; Steinberg, Brymer, Decker, & Pynoos, 2004). School-age children and adolescents have been shown to endorse the full range of PTSD symptoms. Similarly, dose of exposure studies over the past two decades, particularly those after large-scale catastrophic events, have consistently documented that more severe trauma exposure is associated with increased severity of PTSD symptoms (Fairbank, 2008). Additional evidence suggests, similar to adult studies, that particular types of traumatic experiences are associated with differential risk for developing PTSD (Layne et al., in press; Pine & Cohen, 2002). Variations in PTSD severity within and across

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exposure groups have permitted identification of factors that mediate and moderate symptom severity, symptom profile, and clinical course, and are advancing the study of their complex interactions (Layne et al., 2009). Importantly, the epidemiological and clinical literature indicates that PTSD is a serious psychiatric disorder among children and adolescents in regard to distress, duration, and associated behavioral problems, developmental disturbances, and functional impairments (Fairbank, 2008; Zatzick et al., 2008). To date, the diagnosis of PTSD has served to help document the legacy of trauma among children and adolescents.

A DEVELOPMENTAL REFRAMING OF PTSD

The challenge of incorporating an appropriate developmental perspective into *DSM-V* requires refinements in our thinking about PTSD. From a developmental standpoint, it is important to consider reframing aspects of PTSD to include recognition of the ontogenesis of systems that govern the appraisal of, and response to, danger and securing safety (Pynoos, Steinberg, & Piacentini, 1999). For example, Alicia Lieberman (personal communication, January 19, 2009) reminds us that attachment is defined as “the child’s biological propensity to turn to the primary caretaker for protection and reassurance in situations of uncertainty and danger.” This suggests that, although advances in understanding of “fear circuitry” have provided key elements for a revised paradigm for PTSD, a broader framework of appraisal and response to danger may better describe, explain, and predict alterations in maturational and experiential processes in developmental neurobiology, cognition, self-regulation, and the taking of effective action that influences the nature and clinical course of PTSD. This framework is also amenable to the conceptualization of PTSD as a dimensional and continuous, rather than categorical, clinical entity in childhood and adolescence (Broman-Fulks et al., 2009).

Further, the emerging understanding of distinct neural signatures of danger and safety (Rogan, Leon, Perez, & Kandel, 2005) has important implications for the diagnostic criteria for PTSD among children and adolescents because it suggests that some of the manifestations derive from experiences of threat, whereas others derive from inadequacies in achieving safety, including the experience of a failed protective shield (Pynoos et al., 1999). Therefore, developmental considerations need to be guided by a transactional framework of maturation, experience, and reliance on others. Many of the symptom manifestations of PTSD in children and adolescents reflect developmental disturbances in the maturation-driven balance between the need for protection by others, especially by caregivers, and increasing self-efficacy (and in the case of adolescents, collective efficacy) in the face of danger.

As a consequence of trauma, young children may reduce exploration or play to maximize physical or emotional proximity to a parent or caregiver for social referencing, an added measure of protection, and monitoring of the safety of a parent/caregiver. School age children may manifest a host of incident-specific new

fears (Yule, Udwin, & Murdoch, 1990) that may reflect injury to an emerging sense of self-efficacy, and regression to reliance on an earlier version of a protective shield. Adolescents may be propelled into greater independence and misjudgments about danger and protective action that can result in reckless or high-risk behaviors, and, at the same time, take on self-imposed restrictions in pursuing normative developmental opportunities. In addition, the neural signature of achieving safety engages the reward centers of the brain that are also involved in substance abuse (Nestler, 2005) and thrill-seeking behavior (Joseph, Liu, Jiang, Lynam, & Kelly, 2009), an especially relevant consideration in regard to adolescents and young adults.

DEVELOPMENTAL PERSPECTIVE ON TRAUMA REMINDERS

The domain of trauma reminders provides one example of the intersection of translational neurobiological research, knowledge about the ontogenesis of developmental competencies, and findings from clinical assessment and intervention studies with children and adolescents. In *DSM-IV*, the two symptom items relating to trauma reminders were both placed within the B symptom category. However, in some respects, psychological and physiological reactivity to reminders can be conceptualized as serving a supraordinate function, as these responses may trigger symptoms in all three symptom categories. In a recent study, frequency of exposure to trauma reminders was the most potent postwar mediator of PTSD symptoms among Bosnian adolescents (Layne et al., in press). Although not yet studied in a rigorous, prospective design utilizing potential neurobiological markers, detailed clinical reports have suggested that a reminder to a preverbal traumatic experience can evoke extreme reactivity years later in childhood (Kaplow, Saxe, Putnam, Pynoos, & Lieberman, 2006).

Animal studies have indicated the intensifying role of brief reactive exposures to reminders (Cain, Blouin, & Barad, 2003; Pynoos, Ritzmann, Steinberg, Goenjian, & Prisecaru., 1996), the critical mediating role of contextual discrimination of a reminder from the original experience of danger (Bouton, 2002), and the mitigating effect of successful, reliable protective behavior (Rogan et al., 2005). Repeated brief reactive exposure to reminders is associated with both fearful and fearless behavior, and, over time, with a dramatic dysregulation of aggression (Pynoos, Ritzmann, Steinberg, Goenjian, & Prisecaru, 1996). The critical role of contextual discrimination assists in modulation of affect and flexibility in behavioral response, and has developmental determinants associated with the maturation of the hippocampus, medial prefrontal cortex, and pathways that modulate the startle response. Concomitant with these processes of neurobiological maturation is the enhanced competency to discern differences between trauma reminders and the focal traumatic experience, to consider appropriate protective action, and to anticipate and weigh consequences.

Further, modern neurobiology frames these encounters with reminders within a new learning paradigm where reconsolidation occurs and associated negative emotional responses can be modulated through reappraisal. This process relies on frontal cortical regions that undergo slow maturation in childhood and adolescence. These regions may also play a role in heightened contextual sensitivity to danger cues across a spectrum of childhood anxiety disorders (Pine, Helfinstein, Bar-Haim, Nelson, & Fox, 2009) that may intersect with an immature capacity for contextual discrimination.

The field of child traumatic stress has evolved to allow more thorough mapping of age-related types of reminders, as well as to develop trauma reminder-focused interventions that include active modification of the physical and social ecology, recruiting social support, and behavioral and emotional regulation skills to enhance contextual discrimination, manage reactivity, and engage in adaptive behavioral response. Therefore, there is good reason for the text accompanying the diagnostic criteria to acknowledge the important role played by reminders and reactivity in eliciting or prolonging symptoms in Categories B, C, and D, as well as E and F.

PROPOSED DSM-V MODIFICATIONS

A developmental framework suggests that each of the diagnostic symptom criteria requires attention to maturational processes that are associated with age-related manifestations. The Appendix contains recommendations for the inclusion of age-related manifestations with limited criteria modifications in the *DSM-V* diagnosis of PTSD. The following section highlights some key considerations that underlie the recommendations in each criterion category. In addition, the professional organization Zero to Three has published modified criteria for very young children (Lieberman, Wieder, & Fenichel, 1997). These modifications include more observable responses and behavioral symptoms, and more general developmental disruptions, for example, in biological rhythms, and critical relational disturbances.

Criteria A1 and A2

The A1 criterion in children has not generated the same degree of controversy as is found in the adult literature. There are probably several reasons. Rather than generating a debate over the need for a gatekeeper to the diagnosis, it has been viewed as having opened the door to identifying subpopulations of children and adolescents who had previously remained underserved. Second, there has been a stronger tradition of a developmental psychopathology model that has recognized the complex interactions that contribute to the spectrum of normality and pathology. The A1 criterion has also prompted consideration of the developmental epidemiology of exposure that requires the use of more refined exposure screening measures, for example, ones that include categories of near-

drowning, serious burn injuries, and severe dog bites for preschool children. Studies among children also have brought increased attention to the role of witnessing violence or traumatic death or injury, including witnessing, for example, domestic violence, a mother's rape, a hit and run accident of a school-age friend, a parent collapsing from a sudden heart attack, and the shooting of a sibling or friend.

Among the multitude of objective features of a traumatic event, there appear to be specific traumatogenic objective features (e.g., hearing cries of parental distress, experiencing a parent's inability to be able to protect, or being physically trapped) that have special salience from a developmental and etiological standpoint. The degree to which such factors can be operationalized in A1 needs to be explored. Although there remains debate over whether "confrontation with" (in *DSM-IV*) is too broad an inclusionary feature, narrowing its application can capture children exposed to traumatic details in the aftermath of the event that can result in PTSD, for example, a district attorney asking a child to identify his murdered father from graphic, horrifying pictures of his mutilated body.

There are two areas regarding the A1 criterion that have proven most challenging. First, studies of young children with multiple trauma exposures have emphasized the potential effects of co-occurring exposures, e.g., physical abuse, witnessing domestic violence, and serious accidental injury that can accompany neglect, and are associated with both PTSD symptoms and disturbances in a range of developmental competencies (Lieberman, Van Horn, & Ghosh-Ippen, 2005; see Cloitre et al., in press). Second, the field of child traumatic stress has paid particular attention to the combined effects of trauma and loss exposure for three reasons: (a) children and adolescents are at risk for the loss of parents, siblings, and peers through violence, injury, and catastrophic medical events at which they are often present; (b) there is a significant interplay between PTSD and traumatic grief reactions observed in traumatically bereaved child and adolescent populations (Pfefferbaum et al., 1999); and (c) special intervention approaches have been developed that appear effective (Cohen & Mannarino, 2004; Layne et al., 2008). The accompanying text in *DSM-V* needs to alert clinicians to the compounding effect of trauma and loss.

Although there is controversy about the A2 criteria, there are several studies among school-age children and adolescents that indicate its utility. Notably, these studies have operationalized A2 in developmental terms (e.g., "feeling that you could not stop what was happening or that you needed someone to help.") as well as using a Likert scale. Especially in school-age children, A2 subjective features may be experienced in terms of intense physical reactions (e.g., "heart beating so fast," or "sick to my stomach"). With these modifications, A2 has demonstrated incremental explanatory power in dose of exposure studies over and above A1 in predicting variance in child and adolescent PTSD within and across exposure groups (Giannopoulou et al., 2006; Roussos et al., 2005; Zatzick et al., 2008). However, as Scheeringa, Wright, Hunt, and

Zeanah (2006) have noted, A2 has extremely limited application for very young children because of their immaturity in emotional labeling and the subjective reporting that is required. If the A2 criterion is to be retained in *DSM-V*, then, for young children, there should be strong consideration of including fears of harm to, or from, a primary caregiver. Although currently an associated feature of PTSD, exposure-related intense negative emotions, (e.g., shame and guilt) are strongly associated with PTSD severity in school-aged children and adolescents (Deblinger & Runyon, 2005; Joseph, Hodgkinson, Yule, & Williams, 1993; Kletter, Weems, & Carrion, 2009; Pynoos et al., 1987), and reflect salient developmental challenges and potential etiologic factors. Accordingly, if A2 is retained, developmentally appropriate and well-anchored intense negative emotions would need to be added to its diagnostic formulation. Moreover, a wider range of negative emotions, including betrayal, disgust, and rage, that have their own neurobiological and developmental profiles, need to be considered for inclusion.

Criterion B

The symptoms constituting Criterion B also emanate from and reflect a developing neurobiology and maturational competencies. For example, “reexperiencing” symptoms involve the parts of the brain and neural networks that subserve memory and learning in regard to situational context. The hippocampus, a key component of contextual memory and learning, matures over the first years of life and context recall initiates early stages of “action plans” within the hippocampus itself (Pastalkova, Itskov, Amarasingham, & Buzaki, 2008). From a developmental standpoint, action plans in school-age children often take the form of intense wishful thoughts of successful intervention that may persist through adolescence (Dyb et al., 2008; Pynoos & Nader, 1989). Regarding Category B symptoms, age-related manifestations of B1 (intrusive recollections) and B3 (acting or feeling as if recurring) would also encompass preoccupation with these thoughts of preventive and protective intervention, as expressed in play, thought, and behavior. The inclusion of this age-related manifestation will capture the changing developmental content of these preoccupations and draw clinical attention to this key developmental version of reexperiencing. The accompanying text would also help bring needed clarification to the reenactment symptom (B3), given that young and school-age children commonly may not describe flashbacks, but rather may suddenly enact protective or rescue action plans, often in response to a reminder.

Reactivity to reminders (B4 and B5) may reflect both the level of initial reactivity when confronted with a reminder, as well as the ability to calm down after initial reactivity (Pynoos, Steinberg, & Fairbank, 1994). This ability to calm down is related to a slowly developing capacity for affective and physiological self-regulation and contextual discrimination. Identifying difficulty in calming down along with the reactivity may therefore enhance diagnostic accuracy. Further, given that preoccupation with body image is

especially characteristic of adolescence, intrusive images and reminders may be primarily focused on prominent physical scars, bodily disfigurement, or disability in this age group (D. Zatzick, personal communication, February 18, 2009). It is thus important to consider that the content of intrusive images elicited by these reminders may not only be referenced to the original injurious experience, but to its present injurious consequences (Layne, Pynoos, & Cardenas, 2001).

Criterion C

Because three symptoms are required, satisfying Category C symptom criteria has often proven to be a diagnostic hurdle to meeting full criteria for PTSD in both child and adolescent populations, resulting in significant rates of partial PTSD in diverse studies (Pfefferbaum, 1997). In addressing concerns over false-negatives using *DSM-IV* criteria, several studies have proposed the diagnostic utility of reducing the required number of C symptoms to one or more for younger children (Meiser-Steidman, Smith, Glucksman, Yule, & Dalgleish, 2008; Scheeringa et al., 2006).

Category C items that refer to “efforts to avoid” overlook a key issue for children—they often cannot avoid situations, or they may develop an ongoing fear of a trauma-related situation, which they may not confront until they are older. School-aged children may develop incident-specific new fears that may not manifest in avoidant behaviors that would generate adult awareness and attention, even though they constitute a considerable source of distress to the child. Not only would better characterization of this age-related manifestation lead to improved diagnostic accuracy, it would also avert mislabeling a child as simply anxious or misdiagnosing incident-specific fears as phobias.

The second set of Category C symptoms, those pertaining to emotional constriction and estrangement from others, has proven even more challenging as criteria for children and adolescents. The developmental neurobiology and acquisition of competencies in the realm of emotional regulation undergo a slow process of maturation that influences symptom manifestation and is also vulnerable to trauma-related developmental disturbance. For example, young children are gaining the basic tools of emotional labeling, whereas school-aged children are learning more nuanced affect differentiation, both of which contribute to enhanced verbal capacities that serve a critical function in affect regulation of fear and anger (Lieberman et al., 2007). Since *DSM III-R*, it has been recognized that young and school-aged children do not describe feeling “numb.” Restricted range of affect in young children may take the form of lack of affectionate behavior towards primary caregivers and little pleasure in exploration (A. Lieberman, personal communication, January 21, 2009); school-age children may describe not being able to have “good feelings”; and adolescents may describe feeling “nothing” or not caring any longer about others. In addition, the items that refer to estrangement from others have important developmental manifestations. School-aged

children may describe feeling “alone” inside and not close to other people; adolescents may describe trauma-related feelings of being different from their peers and exhibit social isolation.

The item, “a sense of a foreshortened future,” was specifically introduced in *DSM-III-R* to capture children’s trauma-related restriction on future expectations. The item was elaborated to include specific restrictions on plans for marriage, children, and career. Studies by Meiser-Stedman and colleagues of children’s PTSD-related cognitions are providing evidence for the role of trauma-generated negative attitudes about the world, themselves, and the future (Meiser-Stedman et al., 2009). If retained, this is an appropriate time to reword this item to more generally reflect trauma-generated expectations of a restricted personal future and to describe age-related manifestations. There are a range of trauma-generated expectations that can profoundly affect the development trajectory of children and adolescents, and may serve as an important developmental link to a transition to enduring personality change as included in the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision* (ICD-10; World Health Organization, 1992). As an understudied and a not well-operationalized area, the placing of this aspect of trauma-related “learning” within the diagnosis (as criteria, notes on age-specific manifestation or text explanation) remains unclear.

Criterion D

Criterion D symptoms each involve underlying biological processes that have strong developmental parameters. These include (a) attentional biases in regard to threat associated with hypervigilance (Pine et al., 2009), (b) “on alert” and danger responses at night that contribute to sleep disturbances, (c) changes in the startle mechanism that underlie exaggerated startle, (d) disturbances in the regulation of aggression that increase irritability and anger, and (e) reduced filtering of external cues that disrupts concentration. For example, the startle mechanism undergoes a slow maturation in which prepulse inhibitory modulation begins around age 8 to move towards adult levels of sensory-motor gating (Pynoos, Steinberg, Ornitz, & Goenjian, 1997). After a single Criterion A event, a school-age child with no prior trauma history may not exhibit an exaggerated startle, yet may demonstrate delayed maturation of inhibitory startle modulation (Ornitz & Pynoos, 2008) that can contribute to a range of Category D symptoms and Category B increased reactivity to reminders. It is likely that this is but one example of delayed or disturbed maturation of inhibitory pathways in traumatized school-aged children that help mediate the appraisal and response to danger. In addition, children and adolescents are likely to be most vulnerable to epigenetic modifications in gene expression in both neurohormonal and neurophysiological mechanisms due to traumatic experiences (Yehuda, 2009).

There are numerous reasons to include PTSD among the anxiety disorders and there are many important intersections among PTSD and the other disorders in this grouping (Pynoos et al.,

1999). However, there is a confluence of findings from animal models and clinical findings (Pat-Horenczyk et al., 2007) especially among adolescents, and, perhaps, young adults, to suggest another consideration. Within Category D, there should be consideration of including proneness to reckless or thrill-seeking behavior (F. Putnam, personal communication, January 20, 2009). Although related, the source of this behavior is not likely to be irritability or anger, nor hypervigilance, but instead arises from an arousal-related “fearlessness” that has been demonstrated in animal models (Pynoos et al., 1996) and the reward of achieving safety that is associated with thrill-seeking behavior. The clinical importance of recklessness may be as considerable as avoidance, especially in adolescence and young adulthood, where it can have extreme consequence and where mislabeling as either a conduct problem or personality disorder can misdirect clinical and social attention. This added symptom criterion should be considered in a field trial of *DSM-V* that explores expanded dimensions to the diagnosis.

Criterion F: Expansion of Impairment Category to Include Developmental Disturbance

In addition to providing age-related manifestations of symptom criteria, it is important to consider whether the impairment criterion be expanded to include developmental disturbance/impairment. Although not often categorized as functional impairments, developmental disturbances may be associated with short- and long-term serious consequences. These disturbances may include regressions, lack of acquisition of developmental competencies, and inappropriate accelerations, including in neurobiological maturation. For example, after experiencing the traumatic death of a peer, a school-age child may not develop an age-appropriate “chum,” although his or her behavior with peers may not be marked by conduct that brings caregiver attention. Developmental impairments can also be important intervention foci in an effort to restore and promote developmental progression, one of the goals specifically identified in the APA parameters on PTSD (2004).

CONCLUSION

To capitalize on recent advances in the field, *DSM-V* should insure more systematic attention to age-related manifestations and selected modifications of the diagnostic criteria for PTSD that incorporate salient developmental features. This effort is in keeping with the *DSM-V* goal of providing a richer developmental approach across the spectrum of *DSM-V* disorders. Improving our capacity to characterize developmental aspects of PTSD from early childhood through adolescence will also increase the predictive precision for risk makers for adult PTSD (Perkonig et al., 2005) and thereby extend the application of a developmental psychopathology framework of trauma and its sequelae across the life cycle.

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1. The child or adolescent experienced or witnessed an event or events that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others, or was exposed to the traumatic details of the grotesque death of, or serious injury to, a significant other.
 2. The response involves intense fear, helplessness, horror. If there is an opportunity for criteria modification, consider A2 to include other extreme negative emotions, such as extreme guilt, shame, disgust, feelings of profound betrayal or intense empathic arousal to witnessing a significant other in extreme distress. **Note:** In *young children*, fear of harm to or from a protective figure may be particularly salient. A2 criteria have limited application for young children. A2 reactions in *school-age children* include feeling helpless over needing someone to intervene, feeling ineffectual or cowardly, feeling badly over something they did or did not do, feeling shame over uncontrollable feelings or intense physical responses, or feeling that they were going to die. School-aged children may also describe intense physiological reactions, for example, “my heart was beating so fast I thought it was going to break,” “my body was shaking all over,” or “I felt like throwing up,” as a somatic equivalent of intense negative emotions. A2 reactions in *adolescents* may also include anguish over the conflict between self-protection and intervening on behalf of others, humiliation due a sense of powerlessness or vulnerability, and rage at the malicious nature of the intent or action.
- B. The traumatic event is persistently reexperienced in one (or more) of the following ways:
1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. **Note:** In *young children*, recollection of the event may be limited to a central action that is repetitively expressed in words, play, or behavior that may incorporate “wished for” actions, and may not be accompanied by distress. In *school-age children and adolescents*, preoccupation with preventive, protective, and reparative intervention thoughts are common and constitute a form of intrusive recollection. Among *adolescents*, recurrent, distressing preoccupation with disfigurement or body image may constitute a form of event-related intrusion.
 2. Recurrent distressing dreams of the event. **Note:** In *young children*, there may be frightening dreams without recognizable content. In *school-age children*, there may be frightening dreams of dangers that may not appear to be thematically related to the trauma.
 3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). **Note:** In *young children*, trauma-specific reenactment may occur. In *school-age children*, reenactment behaviors may involve acting out protective or rescue strategies. *Adolescents* may take action as if the traumatic event were about to recur.

APPENDIX

Proposed Developmental Modifications for DSM-V Posttraumatic Stress Disorder Criteria for Children and Adolescents

(Notes refer to recommendations for age-related developmental manifestations. Underlines represent recommendations for modifying or adding criteria for adolescents and children.)

- A. The child or adolescent has been exposed to a traumatic event in which both of the following were present:

4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event, or its consequence (e.g., scar or disability).
5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event, or its consequence (e.g., scar or disability). **Note:** It is important to consider that B1, B2, and B3 commonly occur in response to a trauma reminder.
- C. Persistent avoidance of stimuli associated with the trauma and numbing of responsiveness (not present before the trauma), as indicated by three (or more) of the following: [Revised requirement for C category symptoms—in *young children*, several studies suggest that diagnostic requirements for C category symptoms be reduced to one (or more).]
 1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 2. Efforts to avoid activities, places, or people that arouse recollections of the trauma. **Note:** In *young children*, exaggerated age-specific fears, for example, of the dark or the bathroom, may be associated with reminder-related avoidant behavior. In *school-aged children*, trauma-generated new fears may also be associated with efforts to avoid trauma-related reminders.
 3. Inability to recall an important aspect of the trauma. **Note:** In *school-age children*, this may be manifested by altering a threatening aspect of the trauma in recall, for example, decreasing their perceived proximity to the danger.
 4. Markedly diminished interest or participation in significant activities. **Note:** In *young children* this may be manifested as constriction in play or restricted exploratory behavior. In *school-age children*, this may be manifested by lack of interest or participation in age-appropriate new activities. In *adolescents*, this may be manifested by reluctance to pursue new, age-appropriate developmental opportunities (e.g., dating, leaving home to go to college).
 5. Feeling of detachment or estrangement from others. **Note:** *School-age children* may describe feeling “alone” inside and not close to other people. *Adolescents* may describe posttrauma feelings of being different from their peers, feeling that no one can understand them, and feeling emotionally distant from others. *Across age-groups*, this may manifest as social withdrawal. In *school-age children*, this may take the form of unusual quietness or diminished classroom participation. In *adolescents*, this may manifest as social isolation.
 6. Restricted range of affect (e.g., unable to have loving feelings) **Note:** *Young children* may show a lack of affectionate behavior towards primary caregivers and little pleasure in exploration. *School-age children* may describe not being able to have “good feelings.” *Adolescents* may describe feeling “nothing,” or a reduced ability to have “caring feelings for others.”
 7. Sense of a foreshortened future [Change to: trauma-generated expectations of a restricted personal future (e.g., does not expect to have a career, marriage, children, or a normal life span). Foreshortened future represents only one of a number of related trauma-generated expectations. Consideration should be given to renaming this item and expanding it to include a fuller range of trauma-related expectations and their developmental influences. **Note:** In *young children*, one of the most salient trauma-generated expectations is that parents or others will not be able to protect them or that something bad will happen to their parents/caregivers/siblings. *School-age children* may expect that further bad things will happen and their future will not be good, without specific reference points as to how. *Adolescents* may hold a pessimistic or bleak view of a future that is not worth investing in or preparing for.
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
 1. Difficulty falling or staying asleep. **Note:** In *young and school-age children*, this may include parasomnia symptoms of night terrors, restless sleep or vocalizations. In *adolescents*, a radical alteration in sleep pattern may occur.
 2. Irritability or outbursts of anger. **Note:** In *young children*, there may be extreme temper tantrums. *School-age children and adolescents* may exhibit rage.
 3. Difficulty concentrating. **Note:** In *young and school-age children, and adolescents*, trouble concentrating may be manifested as difficulty in paying attention, especially in response to trauma-related internal and external cues.
 4. Hypervigilance. **Note:** In *young and school-age children, and adolescents*, behaviors associated with separation anxiety may constitute a form of hypervigilance, insofar as they involve social referencing for cues of danger and safety, repeated requests for reassurance, and hypervigilance over the safety of significant others. In addition, constantly being on the look out for ways to escape or confront danger can be the focus of vigilance.
 5. Exaggerated startle response. **Note:** *School-age children* need to be asked about startle (“being jumpy”) in response to concrete examples, like hearing a loud noise or being surprised.
 6. Proneness to reckless or thrill-seeking behaviors. **Note:** *Young children* may engage in reckless exploratory behavior. *School-aged children* may engage in behaviors that result in accidental injury to self or others. Reckless behavior in *adolescents* can be in areas of driving, use of firearms, high-risk sexual behavior, substance use, or daredevil stunts, each of which can carry serious risk.
- E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
- F. The disturbance causes clinically significant distress, or impairment in social, occupational, or other important areas of functioning, or has significant adverse developmental impact, including regression, lack of acquisition of developmental competency, or inappropriate acceleration.

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